Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently amended) A project assessment system including computer programs recorded on computer readable medium for assessing a project ~~consisting of~~ comprising a plurality of processes by computing ~~forecast estimates~~ forecasts of said project based on a set of information, the computer programs instruct a computer to perform the functions of:

~~computing, by using process planning information of said project, up-to-date actual progress information of said project, and forecast model information of said project that defines in a probability distribution estimates of variances of a plurality of parameters that are substantial measures of said project, estimation values of said parameters for at least one of the processes~~

based on a user input, selecting on of schemes including an estimation of frequency distribution; an estimation of mutual-correlation of estimated value pattern; an estimation of standard deviation; an estimation of time-series information; and an estimation of fit to a predetermined pattern;

based on the selected assessment scheme, using:

process planning information of each process included in the project;

up-to-date actual process information of said each process of the project, and

forecast model information of said each process of the project that defines as a probability distribution variations of parameters of said processes, which are quantitative values of the project,

so as to compute estimated values for variations of at least two parameters of the parameters;

wherein forecast ~~estimates~~ of the ~~variances~~ variations of the plurality of parameters are obtained by using random numbers, and

assessing the project by determining whether said ~~estimation~~ estimated values of parameters of at least one process of the processes included in the project, or a comparison involving said estimated values satisfy a predetermined criterion ~~or a result of a mutual comparison of said estimation values to the at least one process satisfies a predetermined criterion~~

; wherein

the selected assessment scheme is the estimation of mutual-correlation of estimated value pattern, in which

a first process is selected from the processes of the project, estimated values for variations calculated for the first process are put into a sequence, one of estimated values for the variations is set as a first reference estimated value, and other estimated values for the variations of the first process are normalized based on the first reference estimated value so as to obtain a sequence X,

a second process is selected from the processes of the project, estimated values for the variations calculated for the second process are put into a sequence, one of the estimated values for the variations is set as a second reference estimated value, and other estimated values for the variations of the second process are normalized based on the first reference estimated value so as to obtain a sequence Y,

a mutual-correlation between the sequence X and the sequence Y is computed to assess how high the mutual-correlation therebetween is, thereby to find the estimated values for the variations by following equation:

$$(\text{Mutual-Correlation})=E((X-E(X)(Y-E(Y))/(\sqrt{V(X)}\sqrt{(Y)})$$

wherein, ensemble averages of the sequences X and Y are defined as E(X) and E(Y), and square variances of the sequences X and Y are defined as V(X) and V(Y), respectively.

2. (Currently amended) A project assessment system as defined in Claim 1, wherein said parameters include at least one of ~~parameters among~~ starting date, ending date, job volume, workdays, man-days, material quantities or cost.

3. (Currently amended). A project assessment system as defined in Claim 1, wherein said computing function further includes ~~computing forecast estimates of other processes that have positive mutual-correlation against variation pattern of an estimate of a variance of an arbitral parameter of an arbitral process based on a plurality of said forecast estimates obtained by generating a plurality of random number sets and~~

~~the assessing function makes the determination base in part on the forecast estimates of other processes~~

creating graphs of frequency distribution for the forecasts of the variations of the parameters obtained by using random numbers are created, and using patterns of the graphs so as to assess the project.

4. (Currently amended) A project assessment system as defined in Claim 1, wherein ~~said estimates of variances of said parameters are defined by a probability distribution, and~~

said computing function further includes ~~computing forecast estimates of the variances of a plurality of parameters by using random numbers and computing forecast estimates other processes that have positive mutual-correlation to a variation pattern of an estimates of variances of an arbitral parameter of an arbitral process based on a plurality of said forecast estimates obtained by generating a plurality of random number sets,~~

~~and the assessing function makes the determination base in part on the forecast estimates of other processes~~, based on the forecasts of the variations of the parameters obtained by using random numbers, finding a variation pattern of the forecasts of the variations for one process of the processes of the project, and finding variations for another processes of the project, whose variation pattern has a positive mutual correlation with said found variation pattern, thereby to assess the project.

5. (Currently amended) A project assessment system as defined in Claim 1, wherein said computing function further includes ~~computing a standard deviation of summation of all processes against an estimate of a variances of an arbitral parameter of an arbitral process and a standard deviation of a summation of processes subtracted a specific process from all processes based on a plurality of said forecast estimates obtained by generating a plurality of random number sets, and~~

~~the assessing function makes the determination base in part on the forecast estimates of other processes~~

, based on the forecasts of the variations of the parameters obtained by using random numbers, computing standard deviations (A) of estimated values of a plurality of parameters of objective processes, and standard deviations (B) of estimated values of the plurality of parameters of the objective processes excluding an arbitral process selected by an user, and further using the standard deviations (A) and the standard deviation (B) to assess the project.

6. (Currently amended) A project assessment system as defined in Claim 1, wherein said computing function further includes computing a time-series data of ~~said actual progress of variances~~ variations of said parameters based on said actual progress information, up to a time ~~to carry~~ of carrying out assessment, and a time-series data of said ~~estimates of~~ ~~variances~~ variations of said parameters from a time ~~to carry~~ of carrying out assessment to a future time,

and the assessing function makes the determination base in part on mutual correlations between the time-series data.

7. (Currently amended) A project assessment system as defined in Claim 1, wherein said computing function further includes computing, by using a group of time-series data ~~consisting~~ comprising of time-series data ~~of said actual progress~~ of ~~variances~~ variations of said parameters based on said actual progress information, up to a time ~~to carry~~ of carrying out assessment, and time-series data of said ~~estimates of~~ ~~variances~~ variations of said parameters from a time to carry out assessment to a future time, a degree of mutual correlation of a said group of time-series data by setting a specific critical condition for variation range of ~~said~~ at least one of said parameters among starting date, ending date, job volume, workdays, man-days, material quantities and cost,

and the assessing function makes the determination base in part on the degree of mutual correlations between the time-series data.

8. (Currently amended) A project assessment system including computer programs recorded on computer readable medium for assessing a project ~~consisting of~~ comprising a plurality of processes by computing ~~forecast estimates~~ forecasts of said project based on a set of information, comprising:

a process planning database including process planning information of each process included in said project,

an actual progress information database including up-to-date actual progress information of each process of said project,

a forecast model database including forecast model information of said project that defines ~~in~~ as a probability distribution variations of at least ~~one of estimates of variances of a plurality~~ two of parameters ~~that are substantial measures~~ of said ~~project~~ each process, which are quantitative values of the project, a forecast estimation computation device that, based on a user input, selects one of schemes including an estimation of frequency distribution; an estimation of mutual-correlation of estimated value pattern; an estimation of standard deviation; an estimation of time-series information; and an estimation of fit to predetermined pattern, as an assessment scheme for assessing the project, and computes ~~an~~ forecast ~~estimates of the variances~~ variations of the plurality of parameters by using random numbers, and

a project assessment device that assesses said project using the process planning information, up-to-date actual process information and the forecast model information, based on said estimates and ~~a~~ the selected assessment scheme

; wherein

the selected assessment scheme is the estimation of mutual-correlation of estimated value pattern, in which

a first process is selected from the processes of the project, estimated values for variations calculated for the first process are put into a sequence, one of estimated values for the variations is set as a first reference estimated value, and other estimated values for the variations of the first process are normalized based on the first reference estimated value so as to obtain a sequence X,

a second process is selected from the processes of the project, estimated values for the variations calculated for the second process are put into a sequence, one of the estimated values for the variations is set as a second reference estimated value, and other estimated values for the variations of the second process are normalized based on the first reference estimated value so as to obtain a sequence Y,

a mutual-correlation between the sequence X and the sequence Y is computed to assess how high the mutual-correlation therebetween is, thereby to find the estimated values for the variations by following equation:

$$(\text{Mutual-Correlation})=E((X-E(X)(Y-E(Y))/(\sqrt{V(X)}\sqrt{(Y)})$$

wherein, ensemble averages of the sequences X and Y are defined as E(X) and E(Y), and square variances of the sequences X and Y are defined as V(X) and V(Y), respectively.

9. (Currently amended) A project assessment system as defined in Claim 8, wherein said forecast estimation computation device computes ~~the estimate of variance of said forecast estimation~~ the forecast variations of said parameters and outputs processed values thereof in response to said selected assessment scheme.

10. (Previously Presented)) A project assessment system as defined in Claim 8, wherein said project assessment device is a computer device comprising;

a storage device to store said process planning database, said actual progress information database, and said forecast model database, a CPU that realizes functions of said forecast estimation computation device and said project assessment device, and

a display device to output an assessment result as an output device.

11. (Previously Presented) A project assessment system as defined in Claim 8, wherein said project assessment device is a computer device comprising;

a storage device storing said process planning database, said actual progress information database, and said forecast model database,

a CPU that realizes functions of said forecast estimation computation device and said project assessment device, and

a display device for displaying an assessment result having a graphic display presentation for selecting a project assessment scheme, the project assessment scheme is selected through an input device.

12. (Currently amended) A project assessment method assessing a project consisting of plurality of processes by computing forecast ~~estimates~~ of said project based on a set of information, comprising:

storing process planning information of ~~said project~~ each process included in the project, up-to-date actual progress information of said ~~project~~ each process of the project, and forecast model information of said ~~project~~ each process of said project that defines ~~in~~ as a probability distribution ~~estimates of~~ ~~variances~~ variations of ~~a plurality of~~ parameters ~~that are substantial measures~~ of said ~~project~~ each process of the project, ~~for at least one of the processes~~ which are quantitative values of the project;

based on a user input, selecting one of schemes including an estimation of frequency distribution; an estimation of mutual-correlation of estimated value pattern; an estimation of standard deviation; an estimation of time-series information; and an estimation of fit to predetermined pattern, as an assessment scheme for assessing the project,

computing estimated value of at least one of parameters among starting date, ending date, job size, workdays, man-days, material quantities or cost by using said process planning information, said actual progress information and said forecast model information, and wherein said forecasts of the variations are obtained by using random numbers

assessing one of said parameters by determining whether said ~~estimate~~ estimated value or a comparison involving said estimated value satisfies a predetermined criterion ~~or a result of a comparison of said estimation value to one of the processes satisfies a predetermined criterion~~

; wherein

the selected assessment scheme is the estimation of mutual-correlation of estimated value pattern, in which

a first process is selected from the processes of the project, estimated values for variations calculated for the first process are put into a sequence, one of estimated values for the variations is set as a first reference estimated value, and other estimated values for the variations of the first process are normalized based on the first reference estimated value so as to obtain a sequence X,

a second process is selected from the processes of the project, estimated values for the variations calculated for the second process are put into a sequence, one of the estimated values for the variations is set as a second reference estimated value, and other estimated values for the variations of the second process are normalized based on the first reference estimated value so as to obtain a sequence Y,

a mutual-correlation between the sequence X and the sequence Y is computed to assess how high the mutual-correlation therebetween is, thereby to find the estimated values for the variations by following equation:

$$(\text{Mutual-Correlation})=E((X-E(X)(Y-E(Y))/(\surd V(X)\surd(Y))$$

wherein, ensemble averages of the sequences X and Y are defined as E(X) and E(Y), and square variances of the sequences X and Y are defined as V(X) and V(Y), respectively.

13. (Currently amended) A project assessment method as defined in Claim 12, ~~wherein~~

~~said estimates of variances of said parameters are defined by a probability distribution, and~~ further includes

computing forecast ~~estimates of variances~~ variations of a plurality of parameters by using random numbers~~, and~~

~~computing a plurality of said forecast estimates of variances obtained by generating a plurality of random number sets~~.

14. (Currently amended) A project assessment method as defined in Claim 12 further includes estimating the starting date by steps comprising:

computing an estimate of the starting date as said at least one of parameters, comprising the steps of

determining whether an objective process has a pre-sequential ~~order limited~~ process that limits an order of executing processes in the project, by using process planning information,

setting a reference for starting date of said objective process to an ending date of said pre-sequential ~~order limited~~ process ~~as a reference for starting date of said objective process~~ for a case that said objective process has said pre-sequential ~~order limited~~ process, and

setting ~~a starting date of estimated starting date of said process as a~~ the reference for starting date of said objective process to a planned starting date, for a case that said objective process does not have said pre-sequential order limited process,

~~extracting~~ retrieving information of a probability distribution ~~model~~ of ~~a variance~~ variations of starting date from said forecast model information,

~~computing~~ generating a set of a standard normalized random number ~~set~~ by a simulation based on ~~a~~ ~~variances~~ the variations of starting date defined by the probability distribution,

computing a reference for ~~a variance~~ variation by using said standard normalized random number set, and

determining whether said reference for ~~a variance~~ variation is in a range of ~~a~~ ~~variance~~ variations of starting date based on said forecast model information,

adding said reference for ~~variance as a variance of starting date~~ variation to said reference for starting date for a case that said reference for [[a]] variance is in ~~a~~ the range of ~~variance~~ variances of starting date.

15. (Currently amended) A project assessment method as defined in Claim 12, further includes estimating the starting date by steps comprising:

computing an estimate of elementary unit including man-days and material quantities as said at least one of parameters, comprising the steps

determining whether a similar kind of job ~~to an objective process~~ to a job of an objective process is stored in said actual progress information, and

setting a reference for elementary unit to an actual elementary unit ~~for a reference for a elementary unit~~ of the similar kind of job stored in said actual progress information for a case that a similar kind job ~~to an objective process~~ is stored in said actual progress information, and

setting the reference for elementary unit to ~~a planned~~ an estimate reference for elementary unit ~~for a reference for a elementary unit~~ for a case that a similar kind of job ~~to an objective process~~ is not stored in said actual progress information,

~~extracting~~ retrieving information of a probability distribution ~~model of a variance~~ variations of an elementary unit corresponding to the job being evaluated from said forecast model information,

computing a set of standard normalized random number ~~set~~ by a simulation based on ~~a variance~~ the variations of said elementary unit defined by the probability distribution,

computing a reference for ~~a variance~~ variation by using said standard normalized random number set, and

determining whether said reference for ~~a variance~~ variation is in a range of ~~variance~~ variances of elementary unit based on said forecast model information,

adding said reference for ~~variance as a variance of elementary unit~~ variation to said reference for ~~said~~ elementary unit for a case that said reference for [[a]] variance is in a range of ~~variance~~ variances of ~~said~~ elementary unit.

16. (Currently amended) A project assessment method as defined in Claim 15, further includes estimating the ending date by steps comprising:

computing an estimate of starting date as said at least one of parameters, comprising the steps of

determining whether [[a]] the objective process has a pre-sequential ~~order limited~~ process that limits an order of executing processes in the project by using said process planning information, and

setting a reference for starting date of said objective process to an ending date of said pre-sequential ~~order limited~~ process ~~as a reference for starting date of said objective process~~ for a case that said objective process has said pre-sequential ~~order limited~~ process, and

setting the reference for starting date of said objective process to ~~a starting date of estimated~~ a planned starting date of said objective process ~~as a reference for starting date of said objective process~~ for a case that said objective process does not have said pre-sequential order limited process,

~~extracting~~ retrieving information of a probability distribution ~~model~~ of ~~a variance~~ variations of starting date from said forecast model information of said objective project,

~~computing~~ generating a set of a standard normalized random number ~~set~~ by a simulation based on ~~a variance~~ the variations of starting date defined by the probability distribution,

computing a reference for ~~a variance~~ variation by using said standard normalized random number set,

determining whether said reference for ~~a variance~~ variation is in a range of ~~a variance~~ variations of starting date based on said forecast model information of said project, adding said reference for ~~variance as a variance of starting date~~ variation to said reference for starting date for a case that said reference for ~~a variance~~ variation is in [[a]] the range of ~~a variance~~ variations of starting date, and

the project assessment method further includes computing an estimate of starting date as said at least one of parameters, comprising the steps of

computing an estimate of workdays by multiplying said estimate of elementary unit with an estimated materials in said process planning information,

adding said estimate of workdays to said estimate of starting date.

17. (Currently amended) A project assessment method as defined in Claim 15, wherein a further includes computing an estimate of starting date as said at least one of parameters, by steps comprising:

determining whether ~~an~~ the objective process has a pre-sequential ~~order limited~~ process that limits an order of executing processes in the project, by using said process planning information,

setting a reference for starting date of said objective process to an ending date of said pre-sequential ~~order limited~~ process ~~as a reference for starting date of said objective process~~ for a case that said objective process has said pre-sequential ~~order limited~~ process, and

setting the reference for starting date of said objective process to ~~a starting date of estimated~~ a planned starting date of said objective process ~~as a reference for starting date of said objective process~~ for a case that said objective process does not have said pre-sequential order limited process,

~~extracting~~ retrieving information of a probability distribution ~~model~~ of ~~a variance~~ variations of starting date from said forecast model information of said project,

~~computing~~ generating a set of a standard normalized random number ~~set~~ by a simulation based on ~~a variance~~ the variations of starting date as defined by the probability distribution, computing a reference for ~~a variance~~ variations by using said standard normalized random number set,

determining whether said reference for ~~a variance~~ variations is in a range of ~~a variance~~ variations of the starting date based on said forecast model information

adding said reference for variance ~~as a variance of starting date~~ to said reference for starting date for a case that said reference for a variance is in [[a]] the range of ~~a variance~~ variations of starting date, and

computing an estimate of workdays by multiplying said estimate of elementary unit with an estimated materials in said process planning information,

adding said estimate of workdays to said estimate of starting date ~~and~~ to obtain an estimate of ending date ~~is obtained in said steps therein~~,

and determining whether said estimate of staring date and said estimate of ending date satisfy a critical term of said process planning information,

amending said estimates to satisfy said critical term for a case that said two estimates do not satisfy said critical term of said process planning information.

18. (Currently amended) A project assessment method as defined in Claim 15, further includes computing an estimate of starting date as said at least one of parameters by steps comprising:

determining whether an objective process has a pre-sequential ~~order limited~~ process by using said process planning information,

setting a reference for starting date of said objective process to an ending date of said pre-sequential ~~order limited~~ process ~~as a reference for starting date of said objective process~~ for a case that said objective process has said pre-sequential ~~order limited~~ process, and

setting the reference for starting date of said objective process to ~~a starting date of estimated~~ a planned starting date of said process ~~as the reference for starting date of~~

~~said objective process for~~ a case that said objective process does not have said pre-sequential ~~order limited~~ process,

~~extracting~~ retrieving information of a probability distribution ~~model~~ of ~~a variance~~ variations of starting date from said forecast model information of said project,

~~computing~~ generating a set of a standard normalized random number set by a simulation based on ~~a variance~~ the variations of starting date defined by the probability distribution,

computing a reference for ~~a variance~~ variations by using said standard normalized random number set,

judging whether said reference for ~~a variance~~ variations is in a range of ~~a variance~~ variations of the starting date based on said forecast model information,

adding said reference for ~~variance as a variance of starting date~~ variation to said reference for starting date for a case that said reference for ~~a variance~~ variations is in [[a]] the range of ~~a variance~~ variations of starting date, and

the method further includes steps for obtaining an estimate of ending date by steps comprising:

computing an estimate of workdays by multiplying said estimate of elementary unit with an estimated materials in said process planning information,

adding said estimate of workdays to said estimate of starting date, and

determining whether said estimate of staring date and said estimate of ending date satisfy a critical term of said process planning information,

amending said estimates to satisfy said critical term for a case that said two estimates do not satisfy critical term of said process planning, and

the method further includes steps for computing an estimate of man-days as said at least one of parameters, comprising:

multiplying said estimate of elementary unit with an estimated materials, and then dividing by said amended estimate of workdays.